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September 9, 2016

VIA EMAIL & U.S. MAIL

Ms. Alice Yeh
Remedial Project Manager
U.S. Environmental Protection Agency, Region 2
290 Broadway, 19th Floor
New York, NY 10007

Re: Sequa Corporation Nexus and Request for *De Minimis* Settlement
Lower Passaic River Study Area Operable Unit of the Diamond
Alkali Superfund Site

Dear Ms. Yeh:

This report is submitted on behalf of Sequa Corporation ("Sequa") regarding its alleged nexus to the Lower Passaic River Study Area Operable Unit of the Diamond Alkali Superfund Site (the "LPRSA"). Please add this letter and enclosure to the administrative record for the LPRSA.

The purpose of this report is to document the facts concerning Sequa's alleged connection to the LPRSA and to provide the basis for a *de minimis* settlement. This report contains the following sections: **Part I** provides an executive summary; **Part II** summarizes the facts concerning Sequa's alleged nexus to the LPRSA; **Part III** discusses whether those facts support the conclusion that Sequa is liable for LPRSA response costs under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"); **Part IV** describes Sequa's expenditures and cooperation to date concerning the LPRSA; and **Part V** explains why Sequa is eligible for a *de minimis* settlement.

I. EXECUTIVE SUMMARY

Sequa did not directly discharge hazardous substances to the LPRSA, and there have been no allegations that it did so. Rather, Sequa is alleged to have indirectly discharged hazardous substances to the LPRSA from four facilities (collectively, the "Nexus Sites"): (i) Sequa's former pigment facility located at 185 Foundry Street in Newark, New Jersey (the "Foundry Street Facility"); (ii) the Bayonne Barrel & Drum drum reconditioning facility located at 150-154 Raymond Boulevard in Newark, New Jersey (the "BBD Site"); (iii) the Central Steel Drum drum reconditioning facility located at 704-738 Doremus Avenue in Newark, New Jersey (the "CSD Site"); and (iv) the Avenue P landfill and adjacent D&J Trucking site located

respectively at 357-405 Avenue P and 310-336 Avenue P in Newark, New Jersey (collectively, the “Avenue P/D&J Sites”).

Of the Nexus Sites, only one – the Foundry Street Facility – was identified by USEPA in its June 8, 2006 General Notice Letter (“GNL”) to Sequa. [Ltr. from R. Basso to J. Dowling at 2 (June 8, 2006).] The remaining three sites were alleged by Tierra Solutions, Inc. and Maxus Energy Corporation (“T/M”) in its third-party complaint filed against approximately 300 parties, including Sequa, in the New Jersey state court litigation involving the Passaic River. T/M, and their contractual indemnitee Occidental Chemical Corporation (collectively with T/M, “TMO”), of course, have an enormous financial interest in deflecting attention away from the **intentional discharges** of 2,3,7,8-tetrachlorodibenzo-p-dioxin (“2,3,7,8-TCDD”) and other hazardous substances from 80 and 120 Lister Avenue in Newark, New Jersey (the “Lister Site”), for which TMO is responsible.

The Lister Site’s history of intentional discharges, and utter disregard for public health, safety, and the environment – all to maximize profits – is beyond dispute. *Diamond Shamrock Chem. Co. v. Aetna Cas. & Surety Co.*, 258 N.J. Super. 167, 183 (App. Div. 1992) (“A number of former plant employees testified concerning Diamond’s waste disposal policy which essentially amounted to ‘dumping everything’ into the Passaic River.”); *id.* at 197 (the Lister Site “intentionally and knowingly discharged hazardous pollutants with full awareness of their inevitable migration to and devastating impact upon the environment”); *id.* at 213 (“The only conclusion to be drawn is that Diamond’s management was wholly indifferent to the consequences flowing from its decision [to run its reactor at high temperatures]. Profits came first.”).

Sequa encourages USEPA to **look behind TMO’s allegations** to evaluate for itself whether there is any credible **evidence** supporting them. There is not. Instead, the evidence shows the following:

- Sequa did not use or generate any of the contaminants of concern that are necessitating remedial action in the LPRSA, namely (i) dioxins/furans, predominantly 2,3,7,8-TCDD, (ii) polychlorinated biphenyls (“PCBs”), (iii) dichlorodiphenyl-trichloroethane and its breakdown products (“DDx”); and (iv) mercury (collectively, the “Remedial Action COCs”).
- Sequa’s effluent from the Foundry Street Facility only contained residual amounts of acetic acid, methyl alcohol, isopropyl alcohol, and phosphoric acid.
- Apart from a single discharge of red quinacridone pigment, which is not a hazardous substance, from the Foundry Street Facility that reached the LPRSA in October 1978 (and then completely degraded within hours), there is no evidence that anything attributable to Sequa was discharged from the Foundry Street Facility to the LPRSA.

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- Sequa sent less than 0.25% of all drums to the BBD Site, and there is no evidence that wastewater impacted with hazardous substances attributable to Sequa was present in BBD effluent or that Sequa hazardous substances were discharged from BBD to the PVSC sewer system and reached the LPRSA.
- Sequa sent a mere 54 empty drums that previously contained a hazardous substance to Springfield Barrel in Massachusetts, which in turn may have sent those drums to the CSD Site. Sequa ensured that its drums were fully emptied of all residual material before sending to Springfield Barrel. In addition, there is no evidence that Sequa's drums contained any Remedial Action COCs or that CSD Site stormwater that may have contained Sequa hazardous substances reached the LPRSA.
- There is no evidence that any Sequa hazardous substances were disposed of at the Avenue P/D&J Sites or that Sequa hazardous substances – let alone Remedial Action COCs – reached Plum Creek and then discharged into the LPRSA.

At bottom, the facts – as opposed to TMO's unsupported allegations – simply do not show that Sequa is responsible for LPRSA contamination. Nonetheless, Sequa has spent a decade and millions of dollars cooperating with USEPA to perform the Remedial Investigation and Feasibility Study ("RI/FS") and River Mile ("RM") 10.9 removal action for the LPRSA. With the issuance of the Record of Decision for the lower 8.3 miles of the LPRSA, it is now time for USEPA to offer Sequa a *de minimis* settlement as required by CERCLA.

II. THE FACTS CONCERNING SEQUA'S CONNECTION TO THE NEXUS SITES

As explained briefly below and at length in the enclosed Evaluation of Alleged Nexus of Sequa Corporation to Lower Passaic River Study Area Superfund Site report prepared by TRC Environmental Corporation (the "TRC Report"), the facts surrounding Sequa's involvement with the Nexus Sites demonstrate that Sequa is not associated with LPRSA impacts.

A. Foundry Street Facility

From 1967 until 1986, Sequa (then known as Sun Chemical Corporation), leased and operated a small, approximately 0.8-acre facility within the greater 9.4-acre industrial complex located at 185 Foundry Street in Newark (the "Foundry Street Complex") near RM 1.2.¹ [TRC Report at 2.] Sequa's Foundry Street Facility did not use or generate any of the Remedial Action COCs: dioxin, PCBs, mercury, or DDx. [USEPA, Record of Decision: Lower 8.3 Miles of the Lower Passaic River Part of the Diamond Alkali Superfund Site, Essex and Hudson Counties, New Jersey at 42 (Mar. 3, 2016) ("FFS ROD") ("Risk-based sediment concentrations to protect

¹ In December 1986, Sequa sold its inks and pigments business, including the name "Sun Chemical Corporation" to DIC Americas, Inc. and changed its name to Sequa. USEPA has separately issued a GNL to DIC Americas, Inc./Sun Chemical Corporation for the LPRSA.

human health were developed based on fish or crab tissue concentrations of COCs (dioxins, PCBs and mercury)"); *id.* at 43 ("While all of the COCs discussed in Section 7.2 cause unacceptable risks ([Hazard Quotient] greater than 1) to some or all of the [ecological] receptors evaluated, risk-based [preliminary remediation goals] were developed for dioxins, PCBs, mercury, and Total DDX, because they are representative COCs In addition, most active [remedial action] alternatives (i.e., alternatives other than No Action) designed to address these COCs would also address the other COCs."); *id.* at Table 25 (listing mercury, total PCBs, total DDT, and 2,3,7,8-TCDD as the hazardous substances upon which the FFS preliminary remediation goals are based).] Nor did Sequa use or generate any of the other COCs identified in the FFS ROD, namely copper, dieldrin, polycyclic aromatic hydrocarbons ("PAHs"), and lead. [TRC Report at 9; FFS ROD at 14-16 (identifying only dioxins/furans, PCBs, mercury, DDX, copper, dieldrin, PAHs, and lead as COCs).]

With respect to the Foundry Street Facility, Sequa allegedly is responsible for LPRSA impacts due to (i) the industrial nature of its operations and connection to the Passaic Valley Sewerage Commissioners ("PVSC") system, (ii) the observance of a red pigment in the Lower Passaic River on a single occasion in October 1978, and (iii) the presence of PCBs in Foundry Street Facility soils, each of which is addressed below.

1. *The Foundry Street Facility Is Not Associated with LPRSA Remedial Action COCs*

Sequa's Foundry Street Facility manufactured red to violet quinacridone pigments as powders and filtercakes, which were then sold to Sequa's customers. [TRC Report at 7.] Few raw materials were used by Sequa at the Foundry Street Facility, and none of them are Remedial Action COCs, or COCs at all, for the LPRSA: (i) 2,5-dianilino-terephthalic acid ("DATA"), (ii) polyphosphoric acid ("PPA"), (iii) 2,5-di-p-toluidino-terephthalic acid ("DTTA"), (iv) 2,5-di-p-chloroanilino-terephthalic acid ("DCTA"), (v) acetic acid, (vi) methyl alcohol, (vii) isopropyl alcohol, (viii) caustic soda for neutralization, and (ix) no. 2 fuel oil for the boiler. [*Id.*] Most of these raw materials were fully consumed in the pigment manufacturing process, such that the effluent from the Foundry Street Facility only contained residual amounts of acetic acid, methyl alcohol, isopropyl alcohol, and phosphoric acid. [*Id.* at 8.] This effluent was then neutralized with caustic soda and discharged to the Roanoke Avenue interceptor line of the PVSC system. [*Id.*] Solids from the neutralization may have included sodium sulfate (salt), sodium chloride (salt), and barium chloride (salt). [*Id.*] Significantly, of the raw materials Sequa used at the Foundry Street Facility and the constituents present in its effluent, only acetic acid, methyl alcohol, caustic soda (i.e., sodium hydroxide), and phosphoric acid, are even hazardous substances under CERCLA. 40 C.F.R. § 302.4.

While there is some information that the Roanoke Avenue interceptor line overflowed on occasion and bypassed the PVSC treatment works, there is no evidence that those overflow events contained any effluent from the Foundry Street Facility. [TRC Report at 10.] Even assuming such evidence did exist (which it does not), the constituents in Sequa's effluent – acetic acid, methyl alcohol, isopropyl alcohol, and phosphoric acid – would all rapidly dilute, disperse, and biodegrade in the LPRSA, with the phosphate in the phosphoric acid acting as a biological nutrient and the other residual compounds acting as a source of carbon that would benefit the

biota in the river. [*Id.*] There is no evidence that Sequa's Foundry Street Facility is associated with any COCs for the LPRSA.

2. *The October 1978 Discharge of Red Pigment*

The only known discharge from Sequa's Foundry Street Facility through the PVSC system to the LPRSA was a single discharge of red quinacridone pigment in October 1978. [*Id.* at 9-10.] This discharge occurred as a result of a malfunctioning chamber in the Roanoke Avenue interceptor line. [*Id.*] However, it is an insignificant discharge for three reasons: (i) it was short-lived – the red pigment fully degraded and was not even observable by PVSC within hours, (ii) the red pigment was not associated with any Remedial Action COCs or other COCs for the LPRSA, and (iii) the red pigment is **not** a CERCLA hazardous substance. [*Id.*; C. Felicetti (USEPA) Memorandum to File at 1 (Feb. 13, 1991) (“The finished pigment is a chemical called Quinacridone ... All available information from the process and MSD sheets indicate that the final product is **not hazardous**. As the final material is **not a hazardous material** and discharges are handled through permit with PVSC, I recommend no further action be taken at this time.”) (emphasis added)]; *see also* 40 C.F.R. § 302.4.²

3. *PCBs at the Foundry Street Facility Are Not Associated with Sequa*

Sequa's Foundry Street Facility did not use PCBs in its operations. [TRC Report at 10.] Nevertheless, soils at the Foundry Street Facility were impacted at low levels with PCBs (predominantly Aroclor 1248), with a median concentration of 4.8 mg/kg and an average concentration of 56 mg/kg (with a standard deviation of 160 mg/kg (excluding three outliers)). [*Id.* at 12.] These PCB impacts are most likely attributable to Arkansas Chemical Company, a now-defunct entity that operated adjacent to Sequa at the Foundry Street Complex.

Arkansas Chemical manufactured textile chemicals, including chelating agents, dye carriers, emulsifying agents, fire retardants, fungicides, resin finishes, and water repellants, at the Foundry Street Complex from 1936 (31 years before Sequa began its pigment operation) until 1984. [*Id.* at 14.] Flame retardance and chemical resistance were some of the early uses of Aroclor 1248. [*Id.*] After Arkansas Chemical went bankrupt in 1984, USEPA conducted a removal action at the Foundry Street Complex that focused on abandoned drums, bottles, and other containers of hazardous substances. [*Id.* at 15.] As part of the removal action, unspecified PCB compounds and mercury wastes were identified in the flooded basement of building #25 used by Arkansas Chemical.³ [*Id.*] Subsequent sampling by the New Jersey Department of Environmental Protection (“NJDEP”) detected Aroclor 1248 in soils at the Arkansas Chemical property. [*Id.* at 16.]

² It bears noting that USEPA's investigation of the Foundry Street Facility in 1991 would have related to DIC Americas Inc./Sun Chemical Corporation's operations, not Sequa's operations (which ceased in 1986).

³ The Arkansas Chemical removal action did not involve sampling of on-site soils or groundwater. [*Id.* at 15-16.]

Importantly, Arkansas Chemical's operations were located *up-drainage* from Sequa, meaning that any contaminated effluent or stormwater discharged by Arkansas Chemical into the Foundry Street Complex drainage system would have passed through Sequa's Foundry Street Facility. [*Id.* at 18.] Indeed, in 1991, NJDEP concluded that the Foundry Street Complex drainage system was a "major source of contamination" for, among other hazardous substances, PCBs. [*Id.* at 3.] NJDEP also determined that, during periods of heavy rain, the drains "would frequently flood" and "[a]ny contamination in the drains could be redistributed over other areas" of the Foundry Street Complex. [*Id.*] Sequa's Foundry Street Facility was a frequent victim of such flooding and, consequently, became impacted with contamination from Arkansas Chemical. [*Id.* at 14.]

In 1986, Sequa commenced an investigation of the Foundry Street Facility pursuant to the New Jersey Environmental Cleanup Responsibility Act ("ECRA"), now known as the Industrial Site Recovery Act ("ISRA").⁴ [*Id.* at 10.] Not surprisingly given Arkansas Chemical's up-drainage operations, PCBs were detected in facility soils. [*Id.* at 12-13.] In 1992-1993, Sequa excavated approximately 1,400 cubic yards of PCB-impacted soil and pavement from the Foundry Street Facility at a cost of over \$1.2 million. [*Id.* at 12.] After Sequa performed a further investigation of PCB impacts at the Foundry Street Facility, on October 11, 1995, NJDEP determined that the residual PCBs detected were attributable to "contaminated fill" – not Sequa's operations – and required Sequa only to institute a deed restriction on the property to close its ECRA/ISRA case. [*Id.* at 13.]

4. *Any Sequa Hazardous Substances That Reached the LPRSA Were Previously Removed by Maintenance Dredging*

The Roanoke Avenue interceptor line that was connected to the Foundry Street Complex has a combined sewer outfall ("CSO") located at approximately RM 1.1 of the LPRSA. [*Id.* at 1-2.] During Sequa's operation of the Foundry Street Facility, the lower two miles of the LPRSA were dredged to a depth of thirty (30) feet by the U.S. Army Corps of Engineers ("USACE") in at least 1971, 1972, 1977, and 1983. [*Id.* at 18; FFS ROD at 2 ("the U.S. Army Corps of Engineers (USACE) dredged the channel regularly to maintain navigation and prevent infilling with sediments. The channel below RM 1.9 was regularly maintained until 1983.")].]

Even assuming Sequa-attributable substances reached the Passaic River beyond the isolated incident of the red quinacridone pigment – itself *not* a hazardous substance – in October 1978 (for which there is no evidence), any hazardous substances deposited in river sediments by 1983 would have been removed by maintenance dredging. [TRC Report at 18.] Consequently, only hazardous substances in Sequa's effluent from 1984 to 1986 could theoretically still be present in LPRSA sediments today (again assuming – without any evidence – that CSO overflow events happened while Sequa's effluent was passing through the Roanoke Avenue interceptor line in 1984 to 1986). [*Id.*] Even if such CSO overflow events containing Sequa's effluent did

⁴ ECRA/ISRA was triggered by Sequa's sale of its inks and pigments business to Sun Chemical.

occur, the residual acetic acid, methyl alcohol, isopropyl alcohol, and phosphoric acid in Sequa's effluent would have degraded decades ago. [*Id.* at 10.]

B. BBD Site

The BBD Site was used as a drum reconditioning facility from approximately 1947 until the mid-1980s. [*Id.* at 19.] Operations at the BBD Site resulted in hazardous substances, including volatile organic compounds ("VOCs"), PCBs, metals, and dioxins, being released to on-site soils. [*Id.*] Wastewater from the BBD Site discharged to the PVSC system. [*Id.*]

On May 31, 1996, USEPA issued a GNL to Sequa for the BBD Site, based on evidence that Sequa sent empty drums to the BBD Site for reconditioning. In response to the GNL, Sequa conducted an internal investigation and determined that a minimal amount of drums from its ink and pigment operations in East Rutherford and Teterboro, New Jersey were sent to the BBD Site – an amount representing less than 0.25% of all drums sent to the BBD Site.⁵ [*Id.*] Neither Sequa's East Rutherford nor Teterboro facilities used or generated any Remedial Action COCs. [*Id.*]

Notwithstanding Sequa's connection to the BBD Site, there is no evidence that Sequa's hazardous substances were discharged from the BBD Site and reached the LPRSA. Specifically, there is no evidence that (i) BBD Site effluent contained hazardous substances attributable to Sequa, or (ii) any BBD Site effluent that may have contained Sequa's hazardous substances overflowed and bypassed the PVSC treatment works, and discharged into the LPRSA.

C. CSD Site

CSD reconditioned drums at the CSD Site from approximately 1952 until 1994. Stormwater from the CSD Site flowed to drainage ditches, which in turn discharged to Newark Bay. [*Id.* at 20.] (Wastewater from CSD operations was recycled and not discharged to PVSC.) [*Id.*] Sequa has not been able to identify any documents indicating that it used the CSD Site, with the possible exception of its Mansfield, Massachusetts facility. [*Id.*] From 1984 until 1986, Sequa's Mansfield facility sent drums for reconditioning to Springfield Barrel in Massachusetts, which in turn appears to have sent the drums to the CSD Site. [*Id.*] Although Sequa ensured that these drums were emptied of all residual material prior to sending to Springfield Barrel, at most, only 54 empty drums may have even contained a hazardous substance at one time. [*Id.* at 21.] None of these empty drums, however, previously contained any of the Remedial Action COCs. [*Id.*]⁶

In addition, there is no evidence that any hazardous substances associated with Sequa were discharged from the CSD Site into Newark Bay and reached the LPRSA. Specifically,

⁵ The exact number of drums and Sequa's final allocation percentage for the BBD Site are confidential and cannot be disclosed to USEPA.

⁶ Even if Sequa had sent these 54 drums to the CSD Site, these drums would constitute a miniscule percentage (*i.e.* 0.00018%) of all drums handled by CSD. [*Id.* at 21.]

there is no evidence that (i) CSD Site soils contained hazardous substances attributable to Sequa, or (ii) any CSD Site stormwater that may have contained Sequa's hazardous substances reached the LPRSA.

D. Avenue P/D&J Sites

Sequa owned property at 310-336 Avenue P in Newark from 1960 until 1974,⁷ at which point the property was sold to D&J Trucking.⁸ [*Id.* at 19.] Hazardous waste disposal did not begin at the D&J Trucking site until *after* Sequa's ownership. [*Id.*] At no time did Sequa own a portion of the adjacent Avenue P landfill, which operated from the 1940s until the 1980s. [*Id.*] The Avenue P/D&J Sites discharge stormwater to Plum Creek, which ultimately discharges to the LPRSA. [*Id.*] Importantly, Sequa is only potentially connected to the Avenue P/D&J Sites based on a single document suggesting that filter press waste generated at its Foundry Street Facility may have been transported by D&J Trucking to the Avenue P/D&J Sites:

Sun Chemical Corp. (SUN), 185 Foundry Street, Newark manufactures red, magenta and violet quinacridone pigments. The company generates process waste from filter presses and filter cake washes. This material consists mostly of polyphosphoric acid, but may also contain alcohol and glacial acetic acid depending upon which pigment is being manufactured. Process waste are neutralized with caustic soda in a tank. ... D&J Trucking hauls approximately twenty cubic yards of waste solids from the facility each month. Waste components include barium chloride, sodium chloride, and sodium sulfate.

[NJDEP Mem. from B. Venner to D. Pinto at 22 (June 20, 1990); *see also* TRC Report at 19.] Sequa has not identified any documents or information indicating that it used D&J Trucking, and the NJDEP memorandum cited above does *not* state that D&J Trucking disposed of any Sequa waste at the Avenue P/D&J Sites. [NJDEP Mem. from B. Venner to D. Pinto at 23.] Notably, in 1993, NJDEP invited certain parties – but not Sequa – to enter into an administrative consent order to investigate and remediate the Avenue P/D&J Sites. [TRC Report at 20.]

In any event, none of Sequa's hazardous substances from the Foundry Street Facility are Remedial Action COCs, or COCs at all, for the LPRSA. *See* Section II.A. *supra*. Further, there

⁷ Sequa is aware of a PVSC report suggesting that it operated a facility at 310 Avenue P that had a neutralization tank that allegedly discharged acidic material that reached the LPRSA. Sequa has searched its files and has no record that it ever operated a facility at 310 Avenue P, which strongly suggests that the PVSC report incorrectly identifies Sequa. In any event, effluent from a neutralization tank is unlikely to have contained any of the Remedial Action COCs or any other COCs for the LPRSA.

⁸ D&J Trucking subsequently engaged in improper waste disposal on its property, including burying drums. [NJDEP Mem. from B. Venner to D. Pinto at 2-3 (June 20, 1990) (“On February 9, 1977 Department personnel witnesses drums being buried on D&J property located at 310 Avenue P. ... Further investigation discovered a large hole filled with an unknown liquid material.”).]

is no evidence that any Sequa hazardous substances were disposed of at the Avenue P/D&J Sites or that they reached Plum Creek and then discharged into the LPRSA.

III. SEQUA IS NOT LIABLE FOR LPRSA RESPONSE COSTS

In order to establish CERCLA liability, USEPA must prove that (i) “the defendant falls within one of the four categories of ‘responsible parties’” under Section 107(a); (ii) “hazardous substances are disposed at a ‘facility’”; (iii) “there is a ‘release’ or ‘threatened release’ of hazardous substances from the facility into the environment”; and (iv) “the release causes the incurrence of ‘response costs.’” *Outlet City, Inc. v. West Chem. Prods., Inc.*, 60 Fed. Appx. 922, 926 (3d Cir. 2003) (citing *United States v. Alcan Aluminum Corp.*, 964 F.2d 252, 266 (3d Cir. 1992)). As explained below, Sequa is not liable for LPRSA response costs.

A. Sequa is Not a Potentially Responsible Party

There are four categories of potentially responsible parties (“PRPs”) under CERCLA: (i) current owners and operators of the relevant CERCLA “facility”; (ii) former owners or operators of the relevant CERCLA facility at the time a hazardous substance was disposed; (iii) persons who arranged for the disposal or treatment of a hazardous substance at the relevant CERCLA facility; and (iv) persons who transported a hazardous substance to the relevant CERCLA facility. *See, e.g., Burlington Northern & Santa Fe Ry. v. United States*, 556 U.S. 599, 608-09 (2009); *Litgo N.J., Inc. v. N.J. Dep’t of Env’tl. Prot.*, 725 F.3d 369, 379 (3d Cir. 2013).

The CERCLA “facility” here is the LPRSA, defined as the “the 17-mile stretch of the Lower Passaic River and its tributaries from Dundee Dam to Newark Bay.” [USEPA, Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study ¶ 24 (May 10, 2007) (“The Lower Passaic River Study Area is a ‘facility’ as defined in Section 101(9) of CERCLA”); *id.* ¶ 14(l) (defining LPRSA).] Sequa is not and has never been the “current owner or operator” or “former owner or operator” of the LPRSA. Nor is there any evidence or suggestion that Sequa was a transporter of hazardous substances to the LPRSA. Accordingly, it appears that USEPA is contending that Sequa may be liable under CERCLA as an “arranger.”

Arranger liability requires that Sequa took “intentional steps to dispose of a hazardous substance.” *Burlington Northern*, 556 U.S. at 611. As the United States Supreme Court has explained, “intentional steps” means that it must be proven that Sequa actually *intended* to dispose of hazardous substances in the LPRSA. *Id.* at 612 (“In order to qualify as an arranger, Shell must have entered into the sale of D-D *with the intention* that at least a portion of the product be disposed of”) (emphasis added); *id.* at 612-13 (“the evidence does not support an inference that Shell *intended* such spills to occur”) (emphasis added); *see also United States v. Cornell-Dubilier Elecs., Inc.*, No. 12-5407, 2014 U.S. Dist. LEXIS 140654, at *24 (D.N.J. Oct. 3, 2014) (“Nothing in the record indicates that the Government took *intentional steps to dispose of any pollutants at the facility*. In light of this lack of evidence, the Court concludes that the Settling Parties had a rational basis for finding the Government not liable as a prior arranger”).

The *only* evidence that Sequa discharged anything to the LPRSA is the isolated red quinacridone pigment discharge in October 1978, which is not a CERCLA hazardous substance and in any event quickly degraded. There is no other evidence (just innuendo and unfounded allegations by TMO) that Sequa-attributable hazardous substances were discharged from the Foundry Street Facility, BBD Site, CSD Site, and Avenue P/D&J Sites to the LPRSA. Yet, even if such evidence *did* exist (and it does not), there is no evidence that Sequa intended to dispose of any hazardous substances in the LPRSA. Without intent, Sequa cannot be an arranger under CERCLA – even if Sequa knew or should have known that the PVSC system could overflow on occasion and discharge hazardous substances to the LPRSA. *Burlington Northern*, 556 U.S. at 611 (“knowledge alone is insufficient to prove that an entity ‘planned for’ the disposal”).

B. Sequa’s Discharges, Even if Assumed, Have Not and Will Not Cause the Incurrence of Response Costs

Even putting aside the lack of evidence that Sequa is an arranger, there is another problem with seeking to hold Sequa liable under CERCLA for LPRSA impacts: Sequa’s hazardous substances, if any, have not caused and will not cause the incurrence of response costs.

In order to be liable under CERCLA, *Sequa’s* releases of hazardous substances must cause the incurrence of response costs. *N.J. Turnpike Auth. v. PPG Indus.*, 197 F.3d 96, 104 (3d Cir. 1999) (“In order to prove [arranger liability], our prior case law is clear that such a plaintiff ‘must simply prove that the defendant’s hazardous substances were deposited at the site from which there was a release and that the release caused the incurrence of response costs.’”); *Alcan Aluminum*, 964 F.2d at 271 (if a party “can establish that the hazardous substances in its emulsion could not, when added to other hazardous substances, have caused or contributed to the release or the resultant response costs, then it should not be liable for any of the response costs”); *see also Hatco Corp. v. W.R. Grace & Co.*, 849 F. Supp. 931, 979 (D.N.J. 1994) (determining that plaintiff was not responsible for any response costs because, even though it discharged hazardous substances, the PCBs discharged by the defendant “will drive the cost of the clean-up”).

Response costs at the LPRSA are being incurred as a result of the Remedial Action COCs: dioxins, PCBs, mercury, and DDx. Sequa is not associated with any of these Remedial Action COCs – or any other COCs – for the LPRSA: (i) Sequa’s Foundry Street Facility discharged effluent containing only four hazardous substances (methyl alcohol, and acetic acid and phosphoric acid neutralized by caustic soda), and these hazardous substances (even if discharged to the LPRSA) were removed by maintenance dredging up through 1983 and, in any event, would promptly naturally degrade; (ii) the drums Sequa sent to the BBD Site came from ink and pigment facilities that did not use or generate any of the Remedial Action COCs; (iii) there is no evidence that hazardous substances possibly associated with 54 empty Sequa drums reached the LPRSA from the CSD Site; and (iv) the hazardous substances D&J Trucking reportedly transported from Sequa would not have contained any of the Remedial Action COCs, and in any event, there is no indication that D&J Trucking disposed of Sequa waste at the Avenue P/D&J Sites. As Sequa’s hazardous substances, if any, discharged to the LPRSA will not cause the incurrence of response costs, Sequa cannot be liable under CERCLA.

IV. SEQUA HAS ALREADY PAID MILLIONS OF DOLLARS IN RESPONSE COSTS FOR THE LPRSA

Despite its lack of liability, as a result of the GNL and its desire to be a good corporate citizen, Sequa has voluntarily participated in the RI/FS and RM 10.9 removal action in the LPRSA – at a cost of millions of dollars. On June 8, 2006, USEPA issued a GNL to Sequa because hazardous substances may have been released from the Foundry Street Facility into the LPRSA. [Ltr. from R. Basso to J. Dowling at 2.] On July 18, 2006, Sequa informed USEPA that it would execute the RI/FS Administrative Settlement Agreement and Order on Consent and join the LPRSA Cooperating Parties Group (the “CPG”). [Ltr. from L. Pasculli to S. Flanagan (July 18, 2006).] As USEPA knows, the RI/FS for the LPRSA has cost over \$150 million. Sequa, for its part, has already paid a substantial share of RI/FS costs and will continue to incur RI/FS costs in the future until USEPA deems the study complete, despite determining that its operations are not driving risk or any LPRSA response costs.

In addition, in 2012, USEPA requested that the CPG perform a removal action of a sediment deposit near RM 10.9 with elevated concentrations of dioxins and PCBs. Sequa, and other CPG members (but not TMO – the dominant PRPs for the LPRSA given the intentional discharges from the Lister Site), agreed to perform the RM 10.9 removal action, which involved, in part, the dredging of approximately 16,000 cubic yards of sediment. [USEPA, Administrative Settlement Agreement and Order on Consent for Removal Action (June 18, 2012).] Sequa has paid its share in connection with the RM 10.9 removal action to date.

V. SEQUA SEEKS A *DE MINIMIS* SETTLEMENT TO AVOID FURTHER TRANSACTION COSTS FOR THE LPRSA

USEPA has a statutory obligation to provide parties with a limited nexus to a site an opportunity to enter a *de minimis* settlement “whenever practicable” and “as promptly as possible.” 42 U.S.C. § 9622(g)(1). Sequa is entitled to a *de minimis* settlement offer because it meets the statutory requirements for *de minimis* status. Specifically, under CERCLA, a party is *de minimis* when both of the following are minimal in comparison to other hazardous substances at the site: (i) the amount of the hazardous substances contributed by that party to the site, and (ii) the toxic or other hazardous effects of the substances contributed by that party to the site. 42 U.S.C. § 9622(g)(1)(A). Sequa satisfies both criteria.

A. Sequa’s Discharges to the LPRSA, if Any, Were Minimal in Amount

CERCLA does not provide a specific threshold under which a party’s discharges are considered *de minimis*. See 42 U.S.C. § 9622(g)(1)(A). USEPA’s guidance, however, indicates that *de minimis* parties often are responsible for 1% or less of all hazardous substances at a given site. [USEPA, “Streamlined Approach for Settlements With De Minimis Waste Contributors under CERCLA Section 122(g)(1)(A),” at 2 n.5 (July 30, 1993) (“1993 *De Minimis* Guidance”) (“[T]he *de minimis* cutoff has ranged from .07% to 10.0%, the mean was 1.059%, and the median was 1.0%).]

Here, the only evidence that Sequa discharged anything to the LPRSA is the isolated red pigment discharge in October 1978 that dissipated within hours. [TRC Report at 9-10.] It is difficult to imagine how Sequa’s alleged discharges could not be “minimal in comparison to other hazardous

substances” in the LPRSA in terms of volume, as there is only one identified Sequa discharge to the LPRSA.

B. Sequa’s Discharges to the LPRSA, if Any, Were Minimal in Toxicity

In order to be *de minimis* in terms of toxicity, Sequa’s hazardous substances must be less toxic than those hazardous substances that are driving response costs at the LPRSA. As USEPA’s guidance explains:

Even if multiple waste types exist at a site, [a finding of “minimal in comparison” for toxicity purposes] should not be burdensome. As noted above, “minimal in comparison” has been interpreted to mean “not significantly more toxic than.” However, *where a particular class of wastes drives response costs substantially higher than others*, the party that contributed *that waste type* may be disqualified or a separate allocation formula may be necessary.

[USEPA, “Methodologies for Implementation of CERCLA Section 122(g)(1)(A) De Minimis Waste Contributor Settlements at 10 (Dec. 20, 1989) (emphasis added) (“1989 *De Minimis* Guidance”); *see also* 1993 *De Minimis* Guidance at 2 (“minimal toxicity” *de minimis* requirement is not met “if the hazardous substances at a site are of similar toxicity and hazardous nature”).]

There can be no dispute that dioxin, and to a lesser extent PCBs, are driving toxicity at the LPRSA. [FFS ROD at 29 (“The primary contributors to the excess risk are dioxins/furans (70 percent for fish consumption and 82 percent for crab consumption), dioxin-like PCBs (11 percent for fish consumption and 12 percent for crab consumption), and non-dioxin-like PCBs (16 percent for fish consumption and 5 percent for crab consumption). *The other COPCs contributed a combined 3 percent to the excess cancer risk.*”) (emphasis added); *id.* at 30 (“Dioxins/furans and PCBs combined contribute more than approximately 98 percent of the excess hazard, while the remaining excess hazard is associated with methyl mercury for all receptors for ingestion of both fish and crab.”).]

The facts demonstrate that Sequa is not associated with any dioxin/furans, PCBs, or mercury. That lack of connection is more than sufficient to establish that Sequa’s hazardous substances (if any reached the LPRSA) present minimal toxicity when compared to other hazardous substances in the LPRSA.

C. Offering Sequa a De Minimis Settlement Is in the Public Interest

As Sequa satisfies the statutory requirements for a *de minimis* settlement, the only remaining question is whether such a settlement is “in the public interest.” 42 U.S.C. § 9622(g)(1)(A). The answer is a resounding “yes.” As USEPA’s own guidance recognizes, entering into a final *de minimis* settlement with Sequa now would have several benefits, including (i) reducing transaction costs for Sequa and USEPA, (ii) reimbursing USEPA’s past costs, (iii) providing funds for future response actions at the LPRSA, and (iv) providing an incentive for non-*de minimis* parties to settle their potential liability. [USEPA, Standardizing the *De Minimis* Premium, at 1 (July 7, 1995) (“In addition to reducing transaction costs and resolving the liability of small volume contributors, *de minimis* settlements also serve to

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reimburse the Agency's past costs and provide funds for future site cleanup."); 1989 *De Minimis* Guidance at 2 (*de minimis* settlements "provide an incentive to non-*de minimis* parties to settle simultaneously by offsetting the contributions of *de minimis* parties from the total cost of the response action").

VI. CONCLUSION

Notwithstanding the fact that, as demonstrated above, Sequa has little to no connection to the LPRSA and no connection to the Remedial Action COCs, Sequa has fully cooperated in good faith and already paid appreciably more than its fair share of LPRSA response costs. In light of this, Sequa respectfully submits that it is not only eligible but a perfect candidate for a *de minimis* settlement. While Sequa feels confident in its ability to successfully defend its position, Sequa welcomes the opportunity to discuss and negotiate a *de minimis* settlement with USEPA to avoid further transaction costs for the LPRSA matter.

Sincerely,



Gary P. Gengel
of LATHAM & WATKINS LLP

Enclosure

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**EVALUATION OF
ALLEGED NEXUS
OF SEQUA CORPORATION TO
LOWER PASSAIC RIVER STUDY AREA
SUPERFUND SITE**

**SEQUA CORPORATION
NEWARK, NEW JERSEY**

Project No. 256998.0000

September 9, 2016

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ACRONYMS

ASTs	Aboveground Storage Tanks
ATSDR	Agency for Toxic Substances and Disease Registry
Avenue P/D&J Trucking	Avenue P landfill and the D&J Trucking site on Avenue P
BBD	Bayonne Barrel & Drum site
B/Ns	base/neutral semi-volatile organic compounds
CCC	Consolidated Color and Chemical
CII	Chemical Industries, Inc.
COCs	constituents of concern
CSD	Central Steel Drum site
CSO	Combined Sewer Overflow
DATA	dianilino-terephthalic acid
DCTA	2,5-di-p-chloroanilino-terephthalic acid
DTTA	2,5-di-p-toluidino-terephthalic acid
ECRA	New Jersey's Environmental Cleanup Responsibility Act
FEMA	Federal Emergency Management Agency
Foundry Facility	185 Foundry Street site
GPI	General Printing Ink Division of Sun Chemical Corporation
ISRA	Industrial Site Recovery Act
LPRSA	Lower Passaic River Study Area
mg/L	milligrams per Liter
NJDEP	New Jersey Department of Environmental Protection
nka	now known as
ODEQ	Oregon Department of Environmental Quality
PAHs	polyaromatic hydrocarbons
PCBs	polychlorinated biphenyls
PHCs	petroleum hydrocarbons
PPA	polyphosphoric acid
ppm	parts per million
PRP	Potentially Responsible Party
PVSC	Passaic Valley Sewerage Commission
Sequa	Sequa Corporation
SVOCs	semi-volatile organic compounds
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds
USACE	U.S. Army Corps of Engineers

EXECUTIVE SUMMARY

This technical report summarizes the available facts and information concerning Sequa Corporation's alleged connection to the Lower Passaic River Study Area Superfund Site through (i) 185 Foundry Street in Newark, New Jersey, (ii) the Bayonne Barrel & Drum Superfund Site located at 150-154 Raymond Boulevard in Newark, New Jersey, (iii) the Avenue P landfill and the D&J Trucking site located at Avenue P in Newark, New Jersey, and (iv) the Central Steel Drum site located at 704-738 Doremus Avenue in Newark, New Jersey. Of the four alleged nexus sites, only the 185 Foundry Street facility involved any actual manufacturing processes and materials management by Sequa Corporation, and those operations did not use or generate any of the constituents of concern for the Passaic River.

The perceived nexus for association of Sequa's former 185 Foundry Street facility with the Lower Passaic River Study Area is: 1) industrial operations discharging to the sewer system; 2) observance of a red quinacridone pigment in the Passaic River on a single occasion in 1978; and 3) the fact that Sequa remediated PCBs at the facility. None of these reasons justifies Sequa's continued participation in Lower Passaic River Study Area proceedings. First, Sequa's sewer discharge was relatively innocuous and the vast majority went to the Passaic Valley Sewerage Commission treatment works. Second, the quinacridone pigments that provided the red coloring and the constituents used to make the pigments are not hazardous substances or constituents of concern associated with the Lower Passaic River Study Area. Third, the Aroclor 1248 PCB cleanup conducted by Sequa Corporation was due to contaminated fill and releases at the adjacent Arkansas Chemical site migrating onto the Foundry Street facility property.

Bayonne Barrel & Drum and Central Steel Drum were drum reclamation facilities, where Sequa Corporation sent a minimal amount of drums. The D&J Trucking site became an environmental concern only after ownership by Sequa was transferred to D&J Trucking, which then disposed of hazardous substances at the site. Finally, although hazardous substances may have been transported from the 185 Foundry Street facility to the Avenue P Landfill, those wastes are not constituents of concern for the Passaic River.

In sum, there is no evidence that hazardous substances that would be attributable to Sequa Corporation from any of the alleged nexus sites include constituents of concern for the Passaic River.

1.0 INTRODUCTION

Sequa Corporation (“Sequa”) has been identified as a potentially responsible party (“PRP”) for the Lower Passaic River Study Area Superfund Site (“LPRSA”). This memorandum addresses the technical evidence concerning Sequa’s alleged connection to the LPRSA through (i) 185 Foundry Street in Newark, New Jersey (the “Foundry Facility”), (ii) the Bayonne Barrel & Drum Superfund Site located at 150-154 Raymond Boulevard in Newark, New Jersey (“BBD”), (iii) the Avenue P landfill and the D&J Trucking site located at Avenue P in Newark, New Jersey (“Avenue P/D&J Trucking”), and (iv) the Central Steel Drum site located at 704-738 Doremus Avenue in Newark, New Jersey (“CSD”). The information in this memorandum is based on a review of documentation from the United States Environmental Protection Agency (“USEPA”), the New Jersey Department of Environmental Protection (“NJDEP”), Sequa, other entities, and interviews with current and former Sequa representatives familiar with the alleged nexus sites.

2.0 ALLEGED PATHWAYS TO PASSAIC RIVER

Figure 1 shows the locations of the alleged Sequa nexus sites relative to the Passaic River. Allegations regarding Sequa discharges to the Passaic River consist primarily of: 1) sewer system overflows to the Passaic River; and 2) discharges to storm water drainages that flow to the Passaic River.

2.1 No Allegation of Direct Discharges by Sequa

There has been no allegation of direct discharges by Sequa to the Passaic River. No alleged Sequa nexus sites are adjacent to the Passaic River and no discharges from the nexus sites flow directly to the Passaic River.

2.2 PVSC Sewer System Connections from Foundry Street Complex and BBD

The Passaic Valley Sewerage Commission (“PVSC”) treatment works are located at 600 Wilson Avenue in Newark, New Jersey (Figure 2). The PVSC operates a sewer system that has received wastewater from thousands of significant industrial users over the years. BBD and the Foundry Facility are connected to the PVSC treatment works by this sewer system that was in place during Sequa’s connection, or alleged connection, to each of the nexus sites.

The Foundry Facility is located within the Foundry Street Complex (Figure 3), which shared an on-site sewer system for wastewater and storm water discharges consisting, in part, of outdoor surface trench drains at portions of Arkansas Chemical, Automatic ElectroPlating, and the Foundry Facility and subsurface piping to Roanoke Avenue (Figure 4). The Roanoke Avenue sewer connects to a sewer on Doremus Avenue, which flows to the PVSC treatment works (Figure 2). There is a combined sewer overflow (“CSO”) outfall to the Passaic River at the foot of Roanoke Avenue (approximately River Mile

1.1). In 1969, the City of Newark constructed a dam near this CSO to increase flow to the Doremus Avenue sewer, and ultimately, the PVSC treatment works¹.

The Foundry Facility's discharge points to the sewer system were located down-drainage from Arkansas Chemical (to the immediate south and west) and portions of Automatic ElectroPlating (to the immediate west) and up-drainage from multiple other entities (to the north) prior to connection to the Roanoke Avenue section of the PVSC sewer system (Figures 3 and 4).

Reconditioning operations by BBD included cleaning drums by means of washing and/or incineration, which resulted in wastewater that was discharged to the PVSC sewer system under a permit.

2.3 Alleged Discharges to Surface Water from Avenue P/D&J Trucking and CSD

The Avenue P Landfill is bordered by Plum Creek on the west and south sides. A ditch that forms a tributary to Plum Creek borders the east side of the D&J Trucking site and extends south to Plum Creek. Plum Creek flows adjacent to multiple entities before discharging to the east into the Passaic River below River Mile 1.0 (Figure 2).

According to a 1981 site inspection summary by USEPA, CSD operated a "dry process", where water is not a waste product but is recycled. "The water in this operation is used for cooling purposes associated with the incinerator."² Storm water at the site flowed overland to a drainage ditch on the east and south sides of the site. Flow in the ditch proceeded west to a culvert beneath Doremus Avenue, and then through other ditches to Newark Bay (Figure 2).

3.0 SEQUA'S FOUNDRY FACILITY WITHIN THE FOUNDRY STREET COMPLEX

The approximately 0.8-acre Foundry Facility is located within the Foundry Street Complex – a 9.4-acre industrial parcel that was used by many companies across a variety of industries operating in over 30 different buildings (Figure 3), with a history of operations that goes back more than one hundred years. The Foundry Street Complex is located near River Mile 1.2 of the LPRSA. Sequa leased and operated the Foundry Facility from 1967 to December 1986.

3.1 Overview of Foundry Street Complex

Figures 5 through 8 summarize the known history of ownership and operations at the Foundry Street Complex between the years 1930 and 1997 based on aerial photographs, Sanborn fire insurance maps, and the 1991 summary of the Foundry Street Complex prepared by NJDEP³.

¹ *Pollutions Corrected During 1969*, dated March 31, 1970, by the PVSC.

² *Site Inspection, Central Steel Drum Co.*, dated December 7, 1981, by USEPA.

³ *Aerial Photographs and Sanborn Fire Insurance Maps* from Environmental Data Resources, Inc., and *Memorandum: Responsible Party Investigation – Foundry Street Complex*, dated April 1991, by NJDEP

3.1.1 Foundry Street Complex Shared Sewer System and Flooding Issues

The Foundry Street Complex sewer system was installed in approximately 1930, which became a focus of the required cleanup at the Foundry Facility in 1992/1993 under New Jersey's Environmental Cleanup Responsibility Act ("ECRA"), now known as the Industrial Site Recovery Act ("ISRA"). Regarding this combined drainage system at the Foundry Street Complex, NJDEP stated the following in its 1991 summary:

"It should be noted that the drainage system throughout the Foundry Street Complex is a major source of contamination. Sediment and surface water samples collected from the drainage system in October, 1988 [by NJDEP], contained high concentrations of VOCs [volatile organic compounds], B/Ns [base/neutral semi-volatile organic compounds], PHCs [petroleum hydrocarbons], PCBs, and priority pollutant metals. The drainage system essentially consists of troughs embedded in the driveways which are connected to sewerlines. A site inspection conducted at the Foundry Street Complex on November 7, 1990, revealed that many sections of the drains had collapsed or were broken. Water observed in the drains had a petroleum sheen on its surface and a heavy residue existed on the bottom. It was also reported that the drains would frequently flood during periods of rain. Any contamination in the drains could be redistributed over other areas covered by the flood waters."

"The drainage system connects to sewerlines located on the south side and to the northwest of Sun Chemical [i.e., Foundry Facility]. The sewerline on the south side, traverses underneath the Sun facility. Both sewerlines are connected to an industrial sewerline on Norpak's property to the north. The industrial sewerline is connected to a city sewer on Roanoke Avenue. Four sediment samples were collected from the drainage system and sewerlines surrounding Sun Chemical on July 17, 1990. These samples contained elevated levels of VOCs, B/Ns, organic acids, unknown semi volatiles, and priority pollutant metals."

"Drains from Arkansas Chemical were discovered to flow directly from Building #26, #27 and #28 [on the Arkansas Chemical property]. The drains are connected to the drainage system in the driveway on the north side of the facility [i.e., in the common driveway on the south side of the Foundry Facility]. Herman G. Wieland, Chief Chemist of Arkansas, stated in a Sewer Connection Application dated October 7, 1980 that the plant's effluent is neutralized in an outside tank and discharged into "city storm sewers via covered ditches". Waste water samples taken from Arkansas Chemical in October, 1981 contained trace concentrations of arsenic, cadmium, copper, lead, mercury, nickel, and zinc. Mercury was detected in effluent samples taken in June and July 1981. These contaminants have been detected in sediment samples taken from the drains throughout the Foundry Street Complex."

"Division of Hazard Management personnel noted in 1981, that spillage from the [Arkansas Chemical] process building (#28) could flow unobstructed into strip drains outside [i.e., the common driveway on the south side of the Foundry Facility]. It was also indicated that drains

located in the [Arkansas Chemical] shipping building (#27) flowed directly off premises. In December, 1986, NJDEP personnel observed powder and resin on the floors of the [Arkansas Chemical] process building. In addition, numerous fiber drums and lines on reactor/process vessels were leaking their contents. The roof was also noted to be leaking which could wash spillage into floor drains that flowed into the drainage system. Many of the products removed from Arkansas Chemical by the EPA [during a removal action at the Arkansas Chemical property] were base neutral compounds, acids, cyanides, peroxides, flammables, halogenated organics, oxidizers and organics.”

The main portion of the Foundry Street Complex sewer system was installed in approximately 1930/1931 as evident from the exposed trace captured on the 1931 aerial photograph and the associated depiction on the 1931 Sanborn map (Figure 6). The flow direction of the Foundry Street Complex sewer system is from south (Arkansas Chemical) to north (Roanoke Avenue). Based on investigations conducted at the Foundry Facility, ground water flow is also generally from the south to the north and is typically encountered at a depth of a few feet below ground surface. Investigation of the primary sewer lines identified 12-inch and 6-inch sections of concrete pipe with separations, cracks, and holes⁴. Secondary PVC laterals were also observed, but in better condition than the concrete pipe. As part of the ECRA-required excavation at the Foundry Facility (discussed in Section 5.2.3), accessible portions of this sewer on the south side of the Foundry Facility were replaced in 1992⁵.

According to an NJDEP inspection in 1990, Sun Chemical Facility personnel indicated “that the Facility is subject to heavy flooding due to poor drainage over the entire area (confirmed by water line markings on neighboring buildings) and that the extensive discoloration of the pavement was due to this [flooding]. SCC [Sun Chemical Company] makes the pigments in concentrated form, and the normal small spills from material handling gets exaggerated by the mixing with storm water. All available information from the process and MSD sheets indicate that the final product is not hazardous (emphasis added).”⁶ The Foundry Street Complex is classified as a “high risk flood” area by the Federal Emergency Management Agency (“FEMA”).

At the time of sewer installation in approximately 1930/1931, buildings at the Foundry Street Complex were present southwest of the sewer line and absent northeast of the line (Figure 6). Buildings were constructed northeast of the line during the 1930s and later (Figures 7 and 8), but there was always some open land northeast of the line at and north of the Foundry Facility that would be subject to the flood events. These open areas of the Foundry Facility and the Norpak property to the north would be more prone to the spread of contamination due to flooding, and are where (1) additional excavation was required in 1993 and (2) additional source investigation was required in 1995 to satisfy ECRA obligations at the Foundry Facility, as discussed further below in Sections 5.2.3 and 5.2.4.

⁴ *Report on Investigative Activities for Sun Chemical Corporation*, dated October 5, 1990, by Recon Systems, Inc.

⁵ *Site Wide Soil Remediation Report for Sun Chemical Corporation*, dated February 12, 1993, by Recon Systems, Inc.

⁶ *Memorandum to File: Investigation of Sun Chemical Corp. incident #90-10-24-1208*, dated February 13, 1991, by Chris Felicetti (USEPA; emphasis added)

3.1.2 Foundry Street Complex History of Ownership and Operations (1930 to 1997)

In 1930, the Foundry Street Complex consisted of parcels numbered 4, 5, 6, and 10 (Figure 5). Over the years, Parcel 4, which was the largest in area and ultimately included the Foundry Facility operations, has been subdivided three times as part of changes in ownership. However, in 1930, Parcels 4 and 5 were owned and operated by one entity, Consolidated Color and Chemical (“CCC”). Parcels 6 and 10, which are south of Parcel 5, were owned and operated by entities that are not the focus of this discussion at the Foundry Street Complex, and with the exception of common flooding issues at the Foundry Street Complex, are not considered further.

In 1936, Arkansas Chemical, which was a manufacturer of textile chemicals, began leasing buildings on Parcels 4 and 5 from H.A. Metz (f/k/a CCC). In 1943, Arkansas Chemical purchased Parcel 5 from Chemical Industries, Inc. (“CII”), which had purchased Parcels 4 and 5 in 1939. Arkansas Chemical continued operations on Parcel 5 until approximately 1984 (see Section 5.3.2 for further discussion). It is unclear when Arkansas Chemical discontinued leasing operations on Parcel 4. CII leased buildings on Parcel 4 to various chemical companies until 1962, when it sold that parcel to Kem Realty.

Based on City of Newark directory findings, other tenants at the Foundry Street Complex prior to the 1960s, included Carbozite Protective Coatings (1950s), Maschmeyer Chemicals (1930s to 1950s), Empire Chemical Co. (1940s), and Reduction and Refining Co. (1940s). Many tenants have been identified north of Arkansas Chemical in the Foundry Street Complex after 1960.

The numerous chemical companies and other entities that operated at the Foundry Street Complex after 1960 including the following (with the relative direction from the Foundry Facility in parentheses):

- ABC Demolition Company (north; contractor)
- Ace Chemical Corporation (north)
- Ashland Chemical Company (south; bulk chemical repackaging; known volatile and petroleum releases to ground water)
- Automatic Electro-Plating Corporation (west; plating)
- Avon Drum Corporation (north; drum washing; known Aroclor 1248 detections in soil)
- Berg Chemical Company, Inc. (north; chemical repackaging)
- Conus Chemical Company, Inc. (north; chemical repackaging; known Aroclor 1248 detections in drain sediment)
- Coronet Chemical (north; reclaimed naphthalene; developing a sodium dispersion to destroy PCBs; known Aroclor 1248 in drain sediment)
- County Lift Truck Service, Inc. (north; forklifts)
- CWC Industries, Inc. (north; solvent coatings)
- Fleet Auto Electric Company, Inc. (west; repairs)
- Grignard Chemical Company, Inc. (north; petroleum and chemical products; known Aroclor 1248 in drain sediment)
- Essex Chemical Company (north; inorganic chemicals)

- Honig Chemical and Processing Company (north)
- Hummel Chemical (north; organic and pyrotechnical chemicals)
- Morrel Truck Service (north; repairs)
- Ohmlac Paint and Refinishing Company (south; roofing felts and coatings)
- RFE Industries (north)
- Tennant Chemical Corporation (west)
- Weston Chemical Corporation (north)

As indicated above, some of these entities are suspected to be associated with the presence of PCBs, based on detections in soil and sediments from the Foundry Street Complex drainage system. However, the Foundry Street Complex also contains PCB-contaminated fill based on a 1988 investigation of the Foundry Street Complex by NJDEP and 1995 investigation of the Norpak property by Recon Environmental Corp. to close the ECRA case at the Foundry Facility⁷.

3.1.3 Polychrome Corporation Operated at the Foundry Facility Prior to Sequa

Polychrome Corporation (nka Reichhold Chemicals, Inc.) operated at the Foundry Facility from 1964 to 1966 prior to Sequa.

Polychrome Corporation was identified by NJDEP (1991) as generating the types of discharges at its subsequent operation located at 46 Albert Street that match detections in ground water, surface water, and sediment at the Foundry Street Complex (i.e., toluene, ethylbenzene, phenol, and bis (2-ethylhexyl) phthalate). NJDEP concluded that Polychrome Corporation was a likely source of these contaminants during its operation at the Foundry Facility, since Sun Chemical and Automatic Electro-Plating (adjacent to the Foundry Facility on the west) were not known to utilize these substances.

3.2 Summary of Sequa's Operations – One Parcel within Larger Foundry Street Complex

From 1967 until December 1986, Sequa (then known as Sun Chemical Corporation) leased and operated the small, approximately 0.8-acre Foundry Facility (Figure 4) within the Foundry Street Complex (Figure 3) – a 9.4-acre industrial parcel that was used by many companies across a variety of industries operating in different buildings, as discussed above. Sequa made quinacridone pigments.

4.0 DETAILED EXPLANATION OF SEQUA'S FOUNDRY FACILITY OPERATIONS

The Foundry Facility made red to violet quinacridone pigments, which are a family of highly-colored insoluble pigments that range in color from red to violet. Quinacridones are produced by the cyclo dehydration of 2,5-dianilino-terephthalic acid ("DATA"), 2,5-di-p-chloroanilino-terephthalic acid ("DCTA"), or 2,5-di-p-toluidino-terephthalic acid ("DTTA") in polyphosphoric acid ("PPA"). Subsequent processing produces two basic shades of pigment from DATA and PPA. Shades of red use glacial acetic acid and shades of violet use methyl alcohol. Magenta shades were also produced using the

⁷ Remedial Investigation Work Plan for Norpak Property, dated March 14, 1995 and Remedial Investigation Report for Norpak Property, dated August 17, 1995, by Recon Environmental Corp.

other acids mixed with PPA. The pigments produced at the Foundry Facility were in the form of a powder or filter cake⁸ for industrial resale, using presses and drying ovens.

4.1 Products Manufactured

Primary products manufactured at the Foundry Facility included:

- Quinacridone Violet Pigment No. 19
- Quinacridone Magenta Pigment No. 122
- Quinacridone Red Pigment No. 202

According to the Material Safety Data Sheets (“MSDSs”) for each of the pigments, “this product is not considered to be a hazardous substance under OSHA’s Hazard Communication Standard (29 CFR 1910.1200)”⁹. Quinacridone pigments are also not listed as COCs for the LPRSA or as CERCLA hazardous substances.

4.2 Raw Materials

Raw materials at the Foundry Facility consisted of:

- Water (obtained from City of Newark)
- DATA (in Aboveground Storage Tanks [“ASTs”])
- DCTA; in drums)
- DTTA; in drums)
- Acetic Acid (in AST)
- PPA (in AST)
- Isopropyl alcohol (for shade variations)
- Methyl alcohol (virgin and distilled for reuse; in ASTs)
- Caustic Soda (for effluent neutralization; in ASTs)
- No. 2 Fuel Oil (for boiler; in AST)

DATA, DCTA, and DTTA were entirely consumed in the pigment manufacturing process, and are not COCs for the LPRSA.

The other raw materials (except for No.2 fuel oil) were partially consumed in the manufacturing process and the residuals became part of the waste steam.

⁸ *Waste Effluent Survey*, dated December 12, 1975, from Sun to PVSC

⁹ *ECRA Submittal – Appendices*, dated February 22, 1987, by Sun/DIC Acquisition Corporation

4.3 Processes

*Red Shade Process*¹⁰

PPA and DATA are mixed together and heated to dehydrate the DATA. The mixture is then pumped into a tank that contains water. The slurry is heated under reflux, then pumped through a filter press, which collects the crude pigment. Effluent from the press consists mainly of PPA, which is pumped to a storage tank where it is held until hauled away by a commercial carrier. The semi-finished pigment is then refluxed with glacial acetic acid and pumped to a filter press to collect the finished pigment. The spent acid is pumped to a neutralization tank, neutralized with caustic soda, and discharged to the PVSC.

Violet Shade Process

PPA and DATA are mixed together and heated to dehydrate the DATA. The mixture is added to methyl alcohol and refluxed for several hours. Water is added and the mixture is distilled to recover part of the methyl alcohol, which is reused. The pigment mixture is pumped through a filter press to obtain the finished pigment. The effluent, which is a mixture of alcohol and phosphoric acid, is pumped to a neutralization tank where caustic soda is added to adjust the pH. The spent mixture is then discharged to the PVSC.

Magenta Shade Process

The magenta shade process is similar to the violet shade process except that instead of DATA, either DTTA or DCTA is used.

4.4 Waste

Acetic acid, methyl alcohol, isopropyl alcohol, and phosphoric acid were present in residual amounts in effluent which was pumped to a neutralization tank where caustic soda was added for pH neutralization prior to discharge to the PVSC treatment works. These constituents are not COCs for the LPRSA. .

Solids from wastewater neutralization were transported from the facility each month, and may have included sodium sulfate, sodium chloride, and barium chloride salts¹¹. No records of this transport and disposal were available for review. There is no evidence that these substances are COCs in the LPRSA or that they were discharged to the LPRSA.

In sum, waste from Foundry Facility operations consisted of:

- Effluent (water, methyl alcohol, phosphoric acid, isopropyl alcohol – all discharged to the PVSC treatment works);

¹⁰ ECRA Submittal – Appendices, dated February 22, 1987, by Sun/DIC Acquisition Corporation

¹¹ Responsible Party Investigation – Avenue P Landfill, Newark, dated June 20, 1990, by NJDEP

- Methanol/Phosphoric Acid mix (in AST – hauled away in accordance with environmental regulations to reclaim methyl alcohol); and
- Neutralization tank solids (sodium sulfate, sodium chloride, and barium chloride salts – hauled away in accordance with environmental regulations).

5.0 SEQUA’S FOUNDRY FACILITY IS NOT ASSOCIATED WITH PASSAIC RIVER COCS

The following table lists the primary COCs for the LPRSA and the primary products, ingredients, wastes, and other materials used or generated at the Foundry Facility during Sequa’s operations. As can be seen from the table, the two sets of constituents are different. None of the products, ingredients, wastes, and other materials used or generated at the Foundry Facility during Sequa’s operations are COCs for the LPRSA.

Constituent	COC for LPRSA?	Used/Generated at Foundry Facility?
Dioxins	Yes	No
Pesticides	Yes	No
Aroclor 1248	Yes	No
Mercury	Yes	No
Copper	Yes	No
Lead	Yes	No
PAHs	Yes	No
DATA	No	Yes
DCTA	No	Yes
DTTA	No	Yes
Acetic acid	No	Yes
PPA	No	Yes
Methyl Alcohol	No	Yes
Isopropyl Alcohol	No	Yes
Caustic Soda	No	Yes
No. 2 Fuel Oil	No	Yes

5.1 Any Sequa Effluent Discharges Did Not Include Hazardous Substances That Are COCs for the Passaic River

In October 1978, a red quinacridone pigment was observed in the Passaic River and was traced back to the Foundry Facility. It was determined that a malfunctioning PVSC diversion chamber in the Roanoke Avenue CSO, of which the PVSC had been aware, resulted in the pigment entering the Passaic River. The source of the Foundry Facility discharge was an inadvertently-opened valve that enabled residual PPA and crude quinacridone pigment from the Foundry Facility’s press room to enter the sewer instead of a holding tank. Based on available records, this was a one-time incident during Sequa’s operations at the Foundry Facility. The pigment was described by PVSC inspectors as a deep red pigment that was not water soluble but was dispersible and floated in a jar of water. The pigment was no longer observable in

the river in the afternoon of the reported occurrence¹². As mentioned above, quinacridone pigments are not a hazardous substance under CERCLA.

Apart from this isolated discharge of red quinacridone pigment in 1978, the effluent discharged to the PVSC treatment works could have, on occasion, overflowed to the Passaic River through the Roanoke Avenue sewer system CSO. Even assuming that an overflow event contained effluent from the Foundry Facility, that effluent would only contain residual concentrations of methyl alcohol (CH₃OH), isopropyl alcohol (CH₃CH₂CHOH), acetic acid (CH₃COOH), and phosphoric acid (H₃PO₄) from Sequa's operations. These constituents are not persistent in the environment and would rapidly dilute/neutralize, disperse, and biodegrade in the river within days, with the phosphate from phosphoric acid acting as a biological nutrient in the river and the other residual compounds acting as a source of carbon that would benefit the biota in the river.

5.2 Sequa Was Not a Source Of, or Responsible For, Any PCBs That May Have Reached the Passaic River from the Foundry Street Complex

The source of the Aroclor 1248 contamination at the Foundry Facility, and elsewhere at the Foundry Street Complex, was not Sequa.

Sequa did not use Aroclor 1248 or any other PCBs in its manufacturing processes at the Foundry Facility, which is to be expected given the nature of the Foundry Facility operations. Sequa checked its records for the Foundry Facility and has conducted interviews with knowledgeable personnel – neither of which resulted in any information that PCBs were used at the Foundry Facility. Moreover, a 1985 sewer connection permit application to the PVSC by Foundry Facility personnel certified that PCBs, as part of a list of USEPA priority pollutants, were absent from Foundry Facility operations.¹³

Sequa discovered PCB contamination at the Foundry Facility in October 1986 in connection with due diligence related to the December 1986 sale of its company-wide inks and pigments business to Sun Chemical. This sale triggered investigation under ECRA, which was subsequently superseded by ISRA. As explained below, as part of the ECRA/ISRA process, Sequa voluntarily agreed to remediate PCBs at the Foundry Facility that had been discharged by others at the Foundry Street Complex.

5.2.1 Sequa Removed Aroclor 1242-Contaminated Concrete Base below an Old Boiler in 1987

There is only one PCB detection at the Foundry Facility that is even potentially associated with Sequa's operations. During the due diligence investigation in October 1986, Aroclor 1242 was detected in the lone wipe sample (14 mg/square foot)¹⁴ collected from an oil-stained concrete base beneath a boiler in the boiler room on the south side of the Foundry Facility¹⁵. The source of this detection was unknown, but

¹² *Correspondence from PVSC*, dated October 23, 1978, to Mr. Peter Lynch, Manager, Passaic – Hackensack Region

¹³ *Application for a Sewer Connection Permit*, dated September 25, 1985, from Sequa to PVSC

¹⁴ *Recon Systems, Inc. Analysis Report*, dated January 27, 1987

¹⁵ *Addendum to Sampling and Analysis Plan*, dated February 11, 1988, by Recon Systems, Inc. including Item No. 2: PCB – Boiler Decommissioning

was speculated at the time, to be potentially related to heat transfer oil possibly associated with the boiler¹⁶, which appears to have been present prior to Sequa's operations. Heat transfer uses for PCBs are historically associated with Aroclor 1242¹⁷ and not Aroclor 1248, which was taken out of production by Monsanto by 1971 (Aroclor 1242 continued to be produced until 1977 when Monsanto ceased all Aroclor production).

This single Aroclor 1242 association was the only potential PCB source identified at the Foundry Facility. In 1987, the boiler was abated for asbestos, tested, and certified as clean before scrapping. The underlying concrete base was then removed and, as a conservative management measure, disposed of as PCB-contaminated material¹⁸. Notably, PCBs were not detected at or near the boiler on the north side of the Foundry Facility (Figure 4).

5.2.2 Sequa Removed Aroclor 1248-Contaminated Concrete and Fill from Boiler Room in 1990

Investigations for PCBs (and other contaminants) were conducted at the Foundry Facility in 1988¹⁹, 1990²⁰, and 1991²¹. These investigations found that Aroclor 1248 contamination was associated with paved surfaces and surface and deeper soils (i.e., fill), in a widespread and erratic pattern at the Foundry Facility and adjacent areas, and also in ground water²² (for a limited time at MW-3 in the northeastern part of the Foundry Facility and once out of multiple sampling events at MW-4 and MW-7²³; see Figure 4 for monitoring well locations). Aroclor 1248 was the only PCB detected at or adjacent to the Foundry Facility (with the lone exception discussed above).

Sampling of other areas of the concrete floor and walls in the former boiler room on the south side of the Foundry Facility showed detections of Aroclor 1248 (not Aroclor 1242) above concentrations that would allow the concrete floor to remain in place²⁴, which prompted an interim removal action while ECRA-

¹⁶ Drinker Biddle & Reath correspondence to NJDEP, dated December 18, 1995

¹⁷ *Fact Sheet: Sources of Polychlorinated Biphenyls*, dated August 6, 2003, by the Oregon Department of Environmental Quality ("ODEQ"), and *Toxicological Profile for Polychlorinated Biphenyls (PCBs)*, dated November 2000, by the Agency for Toxic Substances and Disease Registry ("ATSDR")

¹⁸ *Addendum to Sampling and Analysis Plan*, dated February 11, 1988, by Recon Systems, Inc. including Item No. 2: PCB – Boiler Decommissioning

¹⁹ *PCB Sampling and Analysis Results from Boiler Room at Sun Chemical Corporation*, dated April 5, 1988, and *PCB Delineation Sampling and Analysis Results from Boiler Room at Sun Chemical Corporation*, dated June 9, 1988, and *Results of Sampling and Analysis Plan and Clean Up Plan for Sun Chemical Corporation*, dated November 18, 1988, by Recon Systems, Inc.

²⁰ *Report on Investigative Activities for Sun Chemical Corporation*, dated October 5, 1990, and *Report on Remedial Activities at Sun Chemical Corporation*, dated October 5, 1990, by Recon Systems, Inc.

²¹ *Results of Phase II Sampling and Cleanup Plan for Sun Chemical Corporation*, dated May 23, 1991, and *Addendum to "Results of Phase II Sampling and Cleanup Plan"*, dated July 9, 1991, and *Results of Additional Delineation Samples Sun Chemical Corporation*, dated July 31, 1991, by Recon Systems, Inc.

²² *Review of Past and Present Areas of Concern for Sun Chemical Corporation*, dated, January 12, 1993, and *Final Groundwater Activities Report*, dated January 12, 1993, by Recon Systems, Inc.

²³ On May 18, 1992, Aroclor 1248 was detected at 0.002 ug/L at MW-4 and at 0.001 ug/L at MW-7.

²⁴ *Results of Sampling and Analysis Plan and Clean Up Plan for Sun Chemical Corporation*, dated November 18, 1988, by Recon Systems, Inc.

required investigations continued. As PCBs have low solubility in water, but much higher solubility in oil, it is likely that the wipe and core sampling from the areas of oil-stained concrete reflects some degree of solubilization of PCBs already present in and beneath the concrete floor (most likely due to the presence of PCBs in fill material). The boiler room concrete floor and underlying soil fill material were excavated in July 1990²⁵.

Notably, this former boiler room area is located immediately north of the alleyway trench drain between the Foundry Facility and Arkansas Chemical that would be part of a subsequent excavation in 1992 (discussed in section 5.2.3). The former boiler room had a trench floor drain connected to the alleyway trench drain and would have been subject to back-flooding from the Foundry Street Complex drainage system during storm events, as described above in Section 3.1.1.

5.2.3 Sequa Remediated Aroclor 1248-Contaminated Materials Site-Wide in 1992/1993

Sequa excavated approximately 1,400 cubic yards of PCB-contaminated (Aroclor 1248) soil and pavement during ECRA-required remedial action in 1992/1993²⁶.

The 1992 excavations included: 1) the common alleyway and trench drain between the Foundry Facility and Arkansas Chemical (on the south side of the Foundry Facility); 2) a portion of the common alleyway between the Foundry Facility and Norpak (on the north side of the Foundry Facility); 3) a portion of the southeast corner of the Foundry Facility that was otherwise able to be used as an excavation staging area with known Aroclor 1248 concentrations below cleanup goals; 4) portions of the drainage system at the Foundry Facility; and 5) other areas of the Foundry Facility (except western parts, which were addressed statistically under NJDEP rules) away from buildings and other permanent structures (e.g., aboveground tanks and associated containment structures) where excavation was possible, to a depth of generally two feet (Figure 4). Additional excavation was conducted in early 1993 to further address areas of the common alleyway between the Foundry Facility and the Norpak property (to the northeast of the Foundry Facility). The median concentration of all samples (over 230) was 4.8 mg/kg, with an average concentration of 56 mg/kg and a standard deviation of 160 mg/kg (excluding three outlier detections).

5.2.4 Sequa Further Investigated PCB-Contaminated Fill at the Foundry Street Complex in 1995

The combined extensive PCB cleanup in 1992/1993 did not close Sequa's case under ECRA/ISRA because of the presence of Aroclor 1248 at concentrations exceeding cleanup goals at the northeastern Foundry Facility boundary. In response, NJDEP requested that Sequa perform an off-site investigation. Sequa agreed to perform this additional work, in part because a 1988 investigation by NJDEP had identified Aroclor 1248 elsewhere at the Foundry Street Complex²⁷, namely to the southwest (at Arkansas Chemical), west (at Automatic ElectroPlating), and north (at Norpak) of the Foundry Facility (Figure 9), which represent up-drainage as well as down-drainage areas at the Foundry Street Complex.

²⁵ *Report on Remedial Activities at Sun Chemical Corporation*, dated October 5, 1990, by Recon Systems, Inc.

²⁶ *Site Wide Soil Remediation Report for Sun Chemical Corporation*, dated February 12, 1993, by Recon Systems, Inc.

²⁷ *Remedial Investigation Workplan for Norpak Property*, dated March 14, 1995, by Recon Environmental Corp.

The subsequent 1995 investigation²⁸ confirmed that Aroclor 1248 was present in existing fill off-site to the north in a widespread and erratic pattern similar to that observed in fill at the Foundry Facility and identified by NJDEP elsewhere at the Foundry Street Complex. On October 11, 1995, NJDEP determined that the PCBs at the Foundry Facility were attributable to contaminated fill²⁹, and required that Sequa file a restrictive covenant on the property to finally close the ECRA/ISRA case in 1997³⁰. (The option of a restrictive covenant and cap as the Foundry Facility remedy was not available at the time of the 1992/1993 soil excavation cleanup³¹.)

5.2.5 In-Place Fill at Foundry Street Complex Was Contaminated with Aroclor 1248 by Others

Contaminated fill is known to have been widely used in the Newark area near the Passaic River prior to World War II, as tidal marshland (Figure 10) was reclaimed and shipping terminals and additional industrial areas were developed beginning in the 1910s (industrial development proliferated in Newark during the 1800s and extended east to the area near the Passaic River in the early 1900s). Prior to the 1910s, some filling of land in this area of Newark occurred as part of railroad construction across the tidal flats in the 1800s. Fill is present at the Foundry Street Complex and adjacent areas to the west, probably as a result of railroad construction in the 1800s (e.g., a railroad intersection is present immediately west and south of the Foundry Street Complex). It is also likely that nearby areas to the east were filled later as part of the harbor development and land reclamation initiatives beginning in the 1910s. It is unclear whether this latter filling contributed to the fill at the Foundry Street Complex.

Although it is possible that PCB-contaminated fill was placed directly at and adjacent to the Foundry Facility at some point prior to Sequa's operations, it appears more likely that already-placed fill materials were subsequently contaminated by other operations involving Aroclor 1248 at the Foundry Street Complex before the early-1970s (i.e., before production of Aroclor 1248 stopped in 1971³²) for several reasons: 1) the historic timing issues of apparent fill placement at the Foundry Facility (presumably prior to 1931 based on aerial photographs and Sanborn fire insurance maps); 2) the timing of PCB manufacturing in the U.S. (initially in 1927 in Anniston, Alabama, but primarily after 1930 by Monsanto); and 3) the consistent detection of Aroclor 1248 and no other Aroclors in the fill material at the Foundry Street Complex. Regardless of exactly when the fill at the Foundry Facility became contaminated with Aroclor 1248, those PCB detections are not attributable to Sequa because it did not use Aroclor 1248 in its Foundry Facility operations.

5.3 Arkansas Chemical Is the Likely Source of Aroclor 1248 at the Foundry Street Complex

Documents for the Foundry Street Complex strongly suggest that Arkansas Chemical is the likely source of the Aroclor 1248 contamination detected at the Foundry Facility. This conclusion is based on the

²⁸ *Remedial Investigation Report for Norpak Property*, dated August 17, 1995, by Recon Environmental Corp.

²⁹ *Review of Remedial Investigation Report for Norpak Site*, dated October 11, 1995, by NJDEP

³⁰ *Approved ISRA No Further Action Letter for 185 Foundry Street*, dated July 25, 1997, by NJDEP

³¹ *Legal Response to NJDEP Review of Remedial Investigation Report*, dated December 18, 1995, by Drinker Biddle & Reath, with response to NJDEP requirement for environmental restrictive covenant.

³² *Toxicological Profile for Polychlorinated Biphenyls (PCBs)*, dated November 2000, by ATSDR

following lines of evidence: 1) Arkansas Chemical manufactured textile chemicals including retardants and repellants that were early uses of PCBs, including Aroclor 1248; 2) Arkansas Chemical had a historical footprint of operations at the Foundry Street Complex that extended beyond its subsequent property boundary; 3) Arkansas Chemical was observed by NJDEP to have poor materials management practices that would release hazardous substances to the sewer and drainage system; and 4) the drainage system and frequent flooding at the Foundry Street Complex would have distributed any Arkansas Chemical PCB releases and likely accounts for the observed Aroclor 1248 contamination at and beyond the Foundry Facility.

5.3.1 Arkansas Chemical Manufactured Textile Chemicals with Early Aroclor 1248 Uses

Arkansas Chemical manufactured textile chemicals including chelating agents, dye carriers, emulsifying agents, fire retardants, fungicides, resin finishes, and water repellants³³, according to the NJDEP summary. Increased flame retardance and chemical resistance were some of the early uses of Aroclor 1248 in synthetic resin applications³⁴.

5.3.2 Arkansas Chemical Operated at the Foundry Street Complex from 1936 to 1984

According to the 1991 NJDEP summary, Arkansas Chemical leased space at the Foundry Street Complex beginning in 1936 with operations at Buildings 16, 24, 26, 27, 28, 32, and 35 (see building number notations on Sanborn maps [Figures 6 and 7]), not all of which were located on the eventual Arkansas Chemical property footprint. At that time, Buildings 16 and 35 were located north of the footprint of the subsequent Arkansas Chemical property (purchased in 1943). Arkansas Chemical apparently did not operate initially in Buildings 25 and 30, which were present at the property subsequently-purchased by Arkansas Chemical. By 1950 in addition to the other buildings, Arkansas Chemical's "chemical works" (Figure 7) were located in Buildings 25 and 30 immediately south of both the common alleyway trench drain and the Foundry Facility's former boiler area, based on the 1950 Sanborn map. Building 25 also had a basement for sample storage with a sump discharge to the alleyway trench drain.

Arkansas Chemical purchased the property south of the Foundry Facility in 1943 and conducted operations there until approximately 1984. It is unclear in which additional buildings Arkansas Chemical may have operated at the Foundry Street Complex north of its 1943 property. However, textile manufacturing operations are indicated elsewhere at the Foundry Street Complex on the 1950 Sanborn map and may have been utilized by Arkansas Chemical, as the portion of the Foundry Street Complex north of Arkansas Chemical was leased to others by Chemical Industries Inc., which was not identified as an operator at the Foundry Street Complex in the 1991 NJDEP summary.

³³ The "Hydro Pruf" sign on top of Building 28 at Arkansas Chemical is considered a recognizable landmark along the New Jersey Turnpike and was featured in the opening credits of the TV series, "The Sopranos".

³⁴ *Fact Sheet: Sources of Polychlorinated Biphenyls*, dated August 6, 2003, ODEQ, and *Toxicological Profile for Polychlorinated Biphenyls (PCBs)*, dated November 2000, by ATSDR

5.3.3 Arkansas Chemical's Manufacturing Operations Were Connected to the Drainage System

Section 3.1.1 provides observations of the Arkansas Chemical facility and its operations as noted by NJDEP. These observations include: 1) Arkansas Chemical's connection to the Foundry Street Complex sewer and drainage system; 2) the discharge of Arkansas Chemical's effluent to that system; 3) that spillage from Arkansas Chemical could flow unobstructed to the sewer and drainage system; and 4) that the drains would frequently flood during periods of rain, thereby spreading Arkansas Chemical's discharges onto other portions of the Foundry Street Complex.

These observations also include the detections and presence of COCs for the LPRSA including mercury, pesticides, and PAHs, in addition to many other contaminants including other metals, base neutral compounds, cyanides, peroxides, flammables, halogenated organics, oxidizers and volatile organics.

Detections of metals at the Foundry Facility that are COCs for the LPRSA were believed to be due to contaminated fill or releases by others to the shared drainage system at the Foundry Street Complex, as discussed in correspondence from the Foundry Facility to the PVSC *in 1976* regarding trace metals detections in effluent³⁵.

5.3.4 USEPA Conducted a Removal Action at Arkansas Chemical from 1987 to 1989

Arkansas Chemical went bankrupt and closed its operations in approximately 1984. From 1987 to 1989, USEPA conducted a removal action at the Arkansas Chemical facility to manage and dispose of the contents of more than 1,200 abandoned drums, more than 17,000 bottles, and numerous other containers of hazardous materials including base neutral compounds, acids, cyanides, flammables, peroxides, halogenated organics, oxidizers, and other organics used there prior to ceasing operations. In addition to the specified hazardous substances, unspecified PCB compounds and mercury wastes were also disposed of as part of special lab packs from the flooded basement of Arkansas Chemical's Building 25³⁶.

The absence of drums of PCB-containing materials at the Arkansas Chemical property in the late 1980s is not surprising, as PCB use in textile manufacturing operations at the site would have ended more than a decade earlier.

5.3.5 USEPA's Removal Action at Arkansas Chemical Did Not Investigate Subsurface COCs

Notably, USEPA's \$2.7 million removal action at Arkansas Chemical did not include any investigation or remediation of contaminated soils and groundwater. USEPA stated in a May 10, 1993 letter to the City of Newark³⁷ that:

³⁵ *Sequa Correspondence to PVSC*, dated December 3, 1976.

³⁶ *On-Scene Coordinator's Report, Arkansas Chemical Company, Newark, New Jersey*, dated July 31, 1991, by USEPA

³⁷ *Correspondence Regarding Arkansas Chemical Company Site*, dated May 10, 1993, from USEPA to City of Newark, NJ in response to April 15, 1993 correspondence from NJDEP to City of Newark identifying the need for subsurface investigation and remedial action.

“EPA did not address remediation of soils at the site because the entire facility was paved. There were no underground storage tanks on site and there was no indication that the subsurface soils were contaminated. Groundwater contamination was also not addressed under this action. The surface water at the site was collected through a network of drains which fed into the sewer system. This water was then treated by the Passaic Valley Sewerage Authority before being discharged.”

However, based on photographs at the time of the removal action, muddy, unpaved areas appear to be present at removal action areas of the site, and pavement is cracked and seamed in many areas in addition to the outdoor trench drains described previously. These conditions are consistent with a long-term industrial operation that has been abandoned for years, and are generally not considered protective of subsurface conditions.

In addition, USEPA’s 1987 Preliminary Assessment³⁸ recognized the strong potential for air, groundwater, surface water and soil contamination at Arkansas Chemical:

“Chemicals spilled on the ground surface may migrate through the soil column and contaminate groundwater in the area. Spilled chemicals could migrate to storm drains via runoff. Storm drains at the site discharge to the Passaic River. Spillage of chemicals at the site is evidenced by stained areas around storage tanks. The lack of adequate secondary containment systems allows for migration of chemicals into the soil.”

5.3.6 NJDEP and Others Subsequently Identified Aroclor 1248 at Arkansas Chemical

Comprehensive soil and ground water investigations have not yet occurred at the former Arkansas Chemical site. However, in October 1988, NJDEP investigated the Foundry Street Complex³⁹ (i.e., while the USEPA removal action at Arkansas Chemical was nearing completion) and collected soil, sediment, and surface water storm drain samples across the Complex, which included four soil samples from the west end of the Arkansas Chemical property, one soil sample from the west end of the Automatic ElectroPlating property, two sediment samples from drains at the west side of Arkansas Chemical and Automatic ElectroPlating (i.e., approximately 150 feet west of the Foundry Facility), and nine soil samples north of these facilities. Aroclor 1248 was detected in all five of the sediment samples and twelve of the fourteen soil samples, including three of the four soil samples at the Arkansas Chemical property (one soil sample beneath a building at the west end of the Arkansas Chemical property did not have detectable PCBs). Two of the soil samples with Aroclor 1248 detections were located in the southwest corner of the Arkansas Chemical property, which is the farthest point of that property from the Foundry Facility. Of the five sediment samples, the two lowest detections were at the Foundry Facility (4.1 and 2.7 ppm); higher detections (4.2 and 4.8 ppm) were up-drainage to the west at Automatic ElectroPlating and Arkansas Chemical (Figure 9).

³⁸ *Preliminary Assessment, Foundry Street Site/Arkansas Chemical*, dated 1987, by USEPA

³⁹ Data provided in *Remedial Investigation Work Plan for Norpak Property*, dated March 14, 1995, by Recon Environmental Corp.

In February 1997, Metcalf & Eddy, Inc. submitted a Site Investigation Report⁴⁰ of Arkansas Chemical to the City of Newark in preparation for a potential property transfer. The report concluded that “there were numerous samples which exceeded soil cleanup criteria for semi-volatile organics, pesticides, PCBs, and metals.” Aroclor 1248 was detected above cleanup criteria in a sump located in the northeast corner of Building 28 (i.e., southwest of the Foundry Facility in an up-drainage direction; see Figure 4) and at a former pond area on the eastern portion of the Arkansas Chemical property. Metcalf & Eddy concluded:

“The pond and trench will require remediation. This area contains numerous contaminants above RDC [residential direct contact], NRDC [non-residential direct contact] and IGW [impact to groundwater] criteria [for soil]. According to Section D-D of the 1945 Sanborn Map, this area appears to have been a historically low-lying area of the property. It was apparently excavated to enhance its ability to collect storm water runoff from the Arkansas facility [i.e., trench drain system and overland flow] and/or neighboring properties [i.e., Ashland Chemical]. Unfortunately, the high groundwater table at the site places a severe limit on the pond's holding capacity. As a result, the pond is subject to flooding after heavy rains. That flooding presents a possible mechanism for the spread of contaminants out of the pond area, along the ground surface. In addition, the pond presents an on-going source of potential groundwater contamination”

Many of the hazardous materials that were managed by USEPA at the Arkansas Chemical site were also detected in ground water at the eight monitoring wells installed at the Foundry Facility, including the four wells along the adjacent southern and southeastern portions of the Foundry Facility⁴¹. No remedial actions were required by NJDEP to address this ground water contamination at the Foundry Facility or associated soil originating from unspecified off-Facility source(s) (i.e., including Arkansas Chemical, based on ground water flow to the downgradient Foundry Facility).

Based on the Preliminary Assessment by USEPA⁴² and its own evaluation of the Foundry Street Complex (see quoted passages above)⁴³, NJDEP recognized that long term remedial actions by USEPA may include soil and groundwater investigations, deferral back to NJDEP for such work, or implementation of ECRA requirements by those involved in a property transaction at the Arkansas Chemical site.

It is clear that subsurface soil and ground water impacts, including PCBs, are present at Arkansas Chemical. By September 1988, USEPA was completing its removal action (January 1987 to February 1989) at Arkansas Chemical, ECRA-required field investigations were about to begin at the Foundry Facility that identified Aroclor 1248 contamination, and NJDEP had not yet tested soil elsewhere at the

⁴⁰ *Site Investigation Report, The Arkansas Company, 185 Foundry Street, Newark, New Jersey*, dated February 1997, by Metcalf & Eddy, Inc.

⁴¹ *Review of Past and Present Areas of Concern for Sun Chemical Corporation*, dated, January 12, 1993, and *Final Groundwater Activities Report*, dated January 12, 1993, by Recon Systems, Inc.

⁴² *Preliminary Assessment, Foundry Street Site/Arkansas Chemical*, dated 1987, by USEPA

⁴³ Also, *Foundry Street Site / Arkansas Chemical Company, 185 Foundry Street, Newark, Essex County*, dated 1987, by NJDEP (dated early 1987 based on internal document context, referencing January 1987 site visit and planned May 1987 activities by USEPA)

Foundry Street Complex to provide evidence of the extent of Aroclor 1248 impacts that were present at the up-gradient and up-drainage Arkansas Chemical site. The 1995 investigation by Sequa, consistent with the 1988 investigation by NJDEP, identified a widespread and erratic pattern similar to that observed in fill at the Foundry Facility, which led NJDEP to conclude that Sequa was not the source of Aroclor 1248 impacts. As explained, the likely source of these impacts is Arkansas Chemical.

5.4 Even Assuming Sequa's Effluent Discharges Contained Passaic River COCs, Dredging through 1983, Would Have Removed These Hazardous Substances from the Passaic River

Maintenance dredging of the lower 1.9 miles of the Passaic River was conducted by the U.S. Army Corps of Engineers ("USACE") in 1983 to a depth of 30 feet. This followed similar maintenance dredging efforts in 1933, 1941, 1946, 1951, 1957, 1962, 1965, 1971, 1972 and 1977⁴⁴.

The river was first deepened to the 30 feet level in 1932, and was earlier deepened to the 20-22 feet level in 1914, and first widely-dredged in 1884. The area of dredging extended both upstream and downstream of the area of potential discharge from the Foundry Street Complex (i.e., approximately River Mile 1.1 at the Roanoke Avenue CSO outfall). Over 500,000 cubic yards of dredged materials were removed and disposed of at sea during the 1983 maintenance dredging event⁴⁵.

Potential pre-1983 impacts to the Passaic River from the Foundry Street Complex would have been mostly removed with this dredging, and would have reduced the potential window for subsequent contamination from the Roanoke Avenue CSO to potentially re-impact the Passaic River.

6.0 SEQUA'S DISCHARGES ARE NOT HAZARDOUS SUBSTANCES AND/OR NOT COCS

One discharge to the Passaic River was reported during Sequa's operations (i.e., 1967 to December 1986) at the Foundry Facility – a red quinacridone pigment discharge in 1978. However, quinacridone pigments are not COCs for the LPRSA or listed as CERCLA hazardous substances.

Raw materials used by Sequa at the Foundry Facility were either entirely consumed in the pigment manufacturing process (i.e., DATA, DCTA, and DTTA) or were residuals discharged in effluent wastewater. Significantly, the residual materials present in Sequa's effluent (i.e., acetic acid, phosphoric acid, isopropyl alcohol, methyl alcohol, and caustic soda) are not persistent substances and not COCs for the LPRSA, and may have had a net environmental benefit on the LPRSA as nutrients and a source of carbon. In addition, as explained above, Sequa is not a source of PCBs emanating from the Foundry Street Complex.

⁴⁴ *Lower Passaic River Commercial Navigation Analysis*, dated July 29, 2010, by USACE

⁴⁵ *Focused Feasibility Study Report for the Lower Eight Miles of the Lower Passaic River*, dated 2014, by The Louis Berger Group, Inc. in conjunction with Battelle and HDR/HydroQual

7.0 OTHER ALLEGED NEXUSES

Other alleged nexuses between Sequa and the LPRSA are BBD, Avenue P/D&J Trucking, and CSD, each of which is discussed below.

7.1 Summary of BBD

BBD reconditioned and redistributed drums from and to customers including two Sequa facilities in New Jersey (i.e., East Rutherford and Teterboro), which made inks and pigments, but neither of which are known to have used PCBs. Reconditioning operations by BBD included emptying drums of residual contents and cleaning the drums by means of washing and/or incineration, which resulted in waste residuals that were discharged in effluent to the PVSC sewer system under a permit. BBD operated from 1947 until the mid-1980s after filing for bankruptcy in 1982.

USEPA removed approximately 46,000 drums and associated surface wastes in 1993/94 before entering into orders with PRPs for investigation and soil cleanup in 1996 and 2005. Subsequent investigations detected in site soils COCs for the LPRSA including dioxins, furans, PCBs, mercury, and PAHs, as well as VOCs and other metals. Sequa participated with the PRP group in cooperating with USEPA. Based on available documents, it was determined that Sequa sent less than 0.25% of all drums to BBD.

7.2 Summary of Avenue P/D&J Trucking

Sequa owned the property at 310-336 Avenue P, Newark, New Jersey (Figure 2) from 1960 to 1974, at which point the property was sold to D&J Trucking. Sequa did not own the Avenue P landfill at any time.

D&J personnel were arrested for illegal chemical dumping on D&J Trucking Site in 1977, which eventually led to the revocation by NJDEP of a registration permitting restricted disposal. Disposed materials reportedly included off-spec paints, oils, pigments, residual wastes, and drums. Known disposal at the D&J Trucking site occurred between 1974 and 1983. The Avenue P Landfill (Figure 2) received wastes for decades until the early to mid-1980s.

There is some information suggesting that D&J Trucking may have hauled solids from wastewater neutralization (i.e., barium chloride, sodium chloride, and sodium sulfate, which are salts and not COCs for the LPRSA) from Sequa's Foundry Facility to either the Avenue P Landfill or the D&J Trucking Site⁴⁶. No records of this transport and disposal were located. Even if true, there is no evidence that these wastes were discharged to the Passaic River, and these substances are not COCs in the LPRSA.

The primary potential for COCs from the Avenue P Landfill and D&J Trucking Site to reach the LPRSA would appear to be as a result of migration along Plum Creek to the Passaic River. We are unaware of any evidence of such migration or attribution to Sequa. In addition, potential impacts to the Passaic River from both the Avenue P Landfill and the D&J Trucking Site, if any, would presumably have been

⁴⁶ *Avenue P Landfill, Investigative Summary*, dated June 22, 1990, by NJDEP.

mitigated by the 1983 maintenance dredging of the Passaic River discussed in Section 5.4. **Notably, NJDEP invited PRPs, not including Sequa, to enter into an order in 1993 for both the Avenue P Landfill and the D&J Trucking sites.**

7.3 Summary of CSD

CSD reconditioned and redistributed drums from and to clients at a facility on Doremus Avenue (Figure 2). CSD operated there from approximately 1952 until approximately 1994 and incinerated residual materials from drums as part of its drum cleaning operations.

According to a 1981 site inspection summary by USEPA, CSD reportedly processed up to 3,000 drums per day and operated a “dry process”, where water is not a waste product but is recycled. “The water in this operation is used for cooling purposes associated with the incinerator.”⁴⁷ Storm water at the site flowed overland to a drainage ditch on the east and south sides of the site. Flow in the ditch proceeded west to a culvert beneath Doremus Avenue, and then through other ditches to Newark Bay.

Prior to 1952 the site was operated by an ink manufacturer, which was part of Inmont Corporation. NJDEP became involved with the site in 1979 as a result of an anonymous complaint that CSD was burying waste on the property. Incinerator ash was apparently used as fill on the property.

In the recent Passaic River litigation in New Jersey Superior Court, Tierra Solutions Inc. and Maxus Energy Corporation alleged that Sequa sent drums to CSD from facilities at: 1) 1301 South Park Avenue, Linden, New Jersey; 2) 343 Murray Hill Parkway, East Rutherford, New Jersey; 3) 320 Forbes Boulevard, Mansfield, Massachusetts; 4) 3301 Hunting Park Avenue, Philadelphia, Pennsylvania; and 5) 7942 Angus Court, Springfield, Virginia.

No records have been identified to indicate that any Sequa facility, except for the Mansfield, Massachusetts facility, used CSD. According to the 1998 Sun Chemical response to USEPA regarding CSD, “the Mansfield facility utilized a drum reconditioning firm named Springfield Barrel located in Springfield, Massachusetts. However, instead of performing the drum reconditioning, Springfield Barrel subcontracted with CSD and transported GPI’s [General Printing Ink Division of Sun Chemical Corporation] drums to CSD for reconditioning.”⁴⁸ Sequa’s Mansfield facility conducted business with CSD during the period from December 1984 to December 1986, which was when Sequa sold this facility to Sun Chemical as part of broader transaction involving its inks and pigments division.

Based on a summary of the Mansfield facility records by Sun Chemical⁴⁹, approximately 3,390 drums were sent between December 1984 and December 1986 to CSD via Springfield Barrel. Sun Chemical described the contents of the drums and the residual materials removal process in its response to USEPA. Of particular note is the use of a drum pump and individual drum inspections at the Mansfield facility so

⁴⁷ *Site Inspection, Central Steel Drum Co.*, dated December 7, 1981, by USEPA.

⁴⁸ *General Printing Ink Division’s Response to the U.S. EPA’s Request for Information Pursuant to 42 U.S.C. § 9604(E) for the Central Steel Drum Site, Newark, New Jersey*, dated January 21, 1998.

⁴⁹ *Idem*.

as to utilize all of the drummed materials in the manufacturing and repackaging processes and ensure that “there were no discernible materials remaining in the drums” when they left the Mansfield facility. These empty drums formerly contained: 1) finished oil-based inks that the facility repackaged into totes and other containers for their customers (approximately 70%); 2) raw materials (approximately 30%), which included oil based inks, which did not contain CERCLA hazardous substances, and liquid inks, which included varnishes with solvent-based applications (i.e., ethyl alcohol, normal propyl alcohol, normal propyl acetate, carbon butyl carbitol, or toluene); and 3) customer returns (less than 2%). Most of the inks contained pigments that did not include CERCLA hazardous substances, but a very small percentage of the pigments used in the inks were copper or nickel-based (0.3%). In addition, a solution of ethanol, mineral spirits, and butyl carbitol, which are not CERCLA hazardous substances, was used at the Mansfield facility to clean equipment and machinery.

Based on its review, Sun Chemical concluded that approximately 54 empty drums may have come from GPI’s Mansfield facility that may have previously contained a CERCLA hazardous substance. 9.3 drums may have formerly contained a solvent based vehicle other than alcohol and 7.4 drums may have contained copper or nickel-based pigments prior to the residual materials removal process. Of these substances, only copper is a hazardous substance and also a COC for the LPRSA.

Even if the 54 empty drums from Sequa’s former Mansfield facility that may have previously contained CERCLA hazardous substances were assumed to have residual materials processed by CSD, which is not evident, that total would represent less than 0.00018% of CSD’s operations out of over 40 years (i.e., $54 / (3,000 \text{ drums per day} \times 250 \text{ working days per year} \times 40 \text{ years}) = 0.0000018$). Overall, there is no information that the CSD site impacted Newark Bay, let alone the Passaic River, and in any event, Sequa is a very small party for the CSD site.

7.4 There Is No Evidence That Releases of Sequa Hazardous Substances at BBD, Avenue P/D&J Trucking, and CSD, Reached the Passaic River

Based on the information available, there is no reason to believe that: 1) Sequa hazardous substances were in BBD wastewater or otherwise reached the Passaic River through the PVSC sewer system from BBD; 2) hazardous substances from Sequa were disposed of at the Avenue P/D&J Trucking sites or reached the Passaic River through Plum Creek; and 3) Sequa hazardous substances were in storm water from CSD that reached Newark Bay through drainage ditches. Even if such releases did occur, none of the hazardous substances that would be attributable to Sequa include COCs for the Passaic River.

Furthermore, potential impacts to the Passaic River from BBD and the Avenue P/D&J Trucking sites would presumably have been mitigated by the 1983 maintenance dredging of the Passaic River discussed in Section 5.4.

8.0 CONCLUSION

The technical evidence concerning Sequa’s alleged connection to the LPRSA through (i) the Foundry Facility, (ii) BBD, (iii) Avenue P/D&J Trucking, and (iv) CSD has been evaluated and does not indicate

that Sequa is associated with any COCs for the LPRSA. Of the four alleged nexus sites, only the Foundry Facility involved any actual manufacturing processes and materials management by Sequa, and those operations did not result in any of the COCs for the LPRSA.

In summary:

- Sequa leased and operated a small, approximately-0.8 acre Facility at the 9.4-acre Foundry Street Complex from 1967 to December 1986 for the manufacture of quinacridone pigments, which did not employ Aroclor 1248, or use or generate any other LPRSA COCs, in the manufacturing process.
- The only known discharge from the Foundry Facility to the LPRSA was in October 1978 when a red quinacridone pigment was observed in the Passaic River and was traced back to the Foundry Facility. The pigment was no longer observable in the river in the afternoon of the reported occurrence. Importantly, quinacridone pigments are not hazardous substances.
- The only detection of PCBs (Aroclor 1242) potentially associated with the Foundry Facility was a single wipe sample from oil-stained concrete associated with the prior operator beneath one of the boilers at the Foundry Facility. The boiler was abated, tested and certified clean, and scrapped, and the underlying concrete base was removed and disposed of as PCB-contaminated waste. No other detection of Aroclor 1242 was encountered at the Foundry Facility, and no other source of PCBs was identified at the Foundry Facility.
- Although Sequa conducted a cleanup of Aroclor 1248 at the Facility in 1992/1993 as part of ECRA/ISRA obligations, the Aroclor 1248 contamination was subsequently identified, in part, as a pre-existing condition in fill at the Foundry Street Complex and not attributable to the Foundry Facility or Sequa.
- The likely significant source of the Aroclor 1248 contamination at the Foundry Street Complex is Arkansas Chemical, which was a textile chemical manufacturer whose products included fire retardant and water resistant chemicals, which were early uses of Aroclor 1248.
- The widespread occurrence of Aroclor 1248 across the Foundry Street Complex at and north of the Foundry Facility is due to discharges by others to the Foundry Street Complex drainage system, and flooding during moderate to heavy rainfall, which spread Aroclor 1248 and other contaminants in surface soils across the Foundry Street Complex and onto the Foundry Facility.
- Many other entities in the Foundry Street Complex are potential sources of COCs for the Passaic River, including PCBs.
- During Sequa's operations, maintenance dredging of the lower 1.9 miles of the LPRSA was performed by USACE in 1971, 1972, 1977, and 1983. Such dredging would have significantly removed any assumed Sequa-related prior discharges through the CSO to the LPRSA.
- The BBD site was a drum reclamation facility, where Sequa sent a minimal number of drums. There is no evidence that Sequa hazardous substances were discharged from BBD to the LPRSA.
- The CSD site was drum reclamation facility, where Sequa sent a minimal number of drums. There is no evidence that Sequa hazardous substances were discharged from CSD to the LPRSA.
- The D&J Trucking site became an environmental concern only after Sequa sold the property to D&J Trucking in 1974.

- Although hazardous materials may have been transported from the Foundry Facility to the Avenue P Landfill, there is no evidence that hazardous substances at the Avenue P Landfill that would be attributable to Sequa 1) includes COCs for the Passaic River or 2) were discharged to the LPRSA.

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